

Electronic Supporting Information

for

A New Type of pH-Responsive Coordination Polymer Spheres as the Vehicle for Targeted Anticancer Drug Delivery and Sustained-Release

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Tables and Figures

Ethanol content (%)	80	95	100
Drug loading efficiency (%)	~ 98	< 60	< 20

Table S1 DOX·HCl loading efficiencies in different ethanol content.

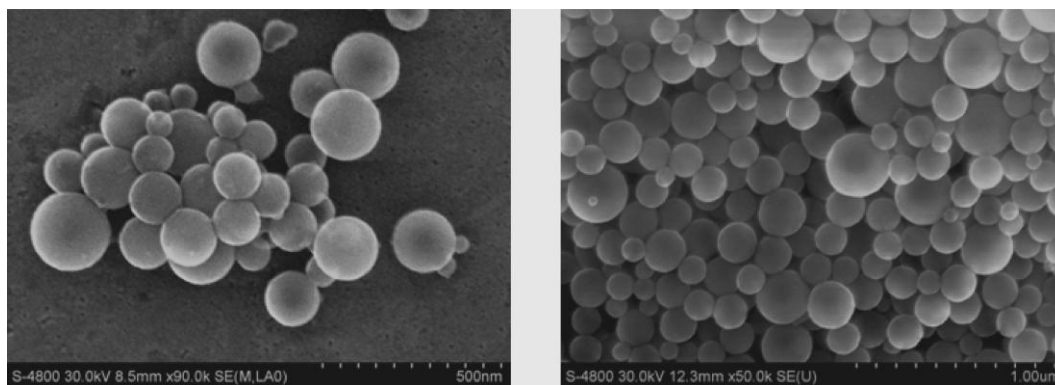


Figure S1 SEM (Scanning Electron Microscope) of Fe(bbi) spheres.

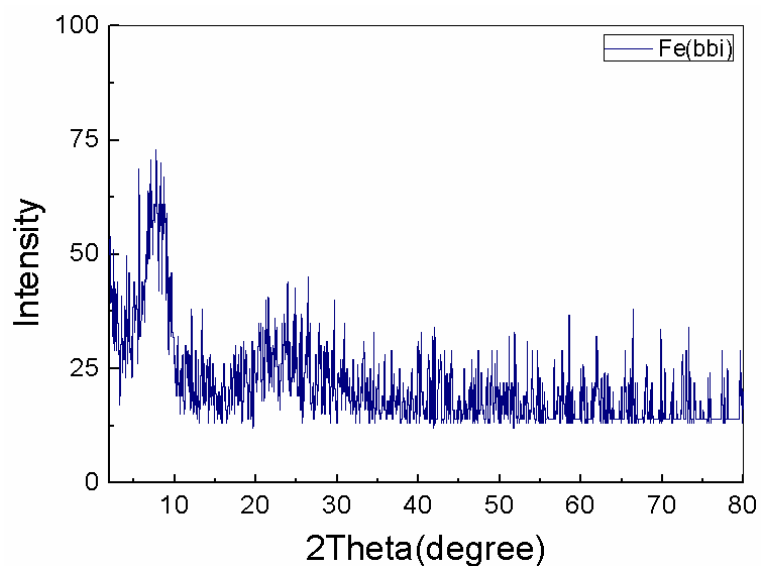


Figure S2 PXR D patterns of Fe(bbi) coordination polymer spheres.

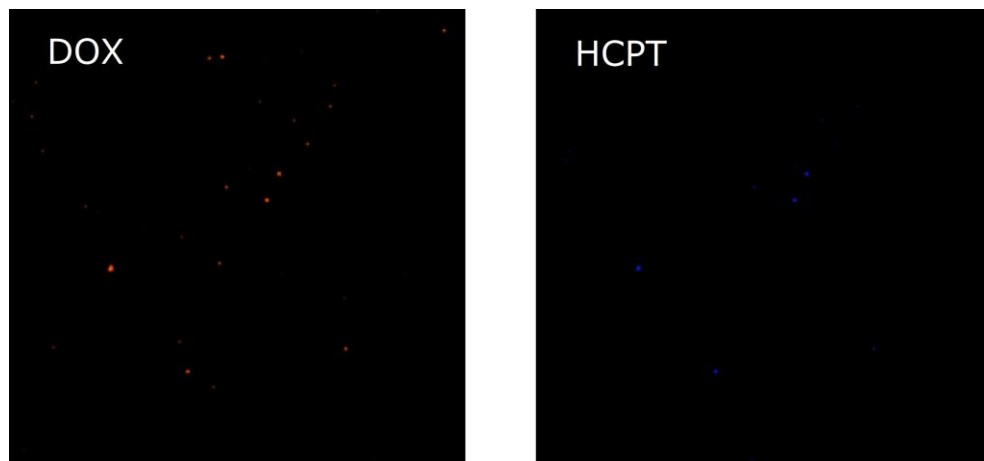


Figure S3 Fluorescence optical microscope images of coordination polymer spheres loading both DOX · HCl and HCPT collected at: λ_{exc} = 540 - 552 nm and λ_{em} > 590 nm for DOX; λ_{exc} = 359 - 371 nm and λ_{em} > 397 nm for CPT.

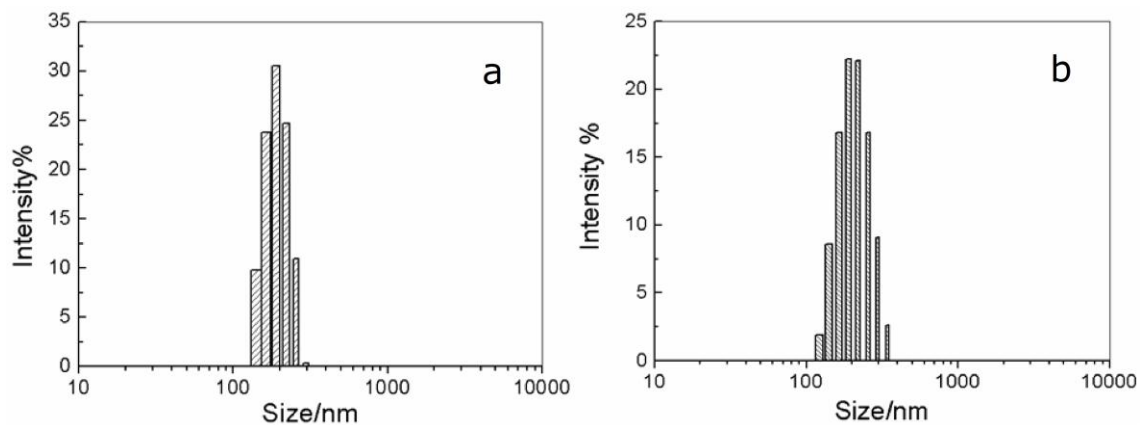


Figure S4 Size distribution profiles for (a) DOX/Fe(bbi) and (b) DOX/Fe(bbi)@SiO₂ spheres determined by DLS.

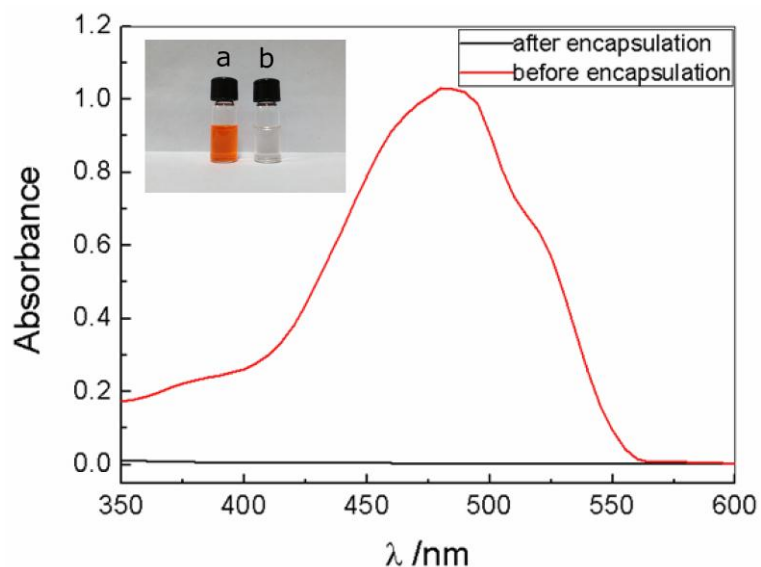


Figure S5 UV-visible spectra of the solution before and after encapsulation (solution alone, without spheres) which was diluted to 1/10. Embedded figure is the photograph of the reaction solution before and after DOX encapsulation.

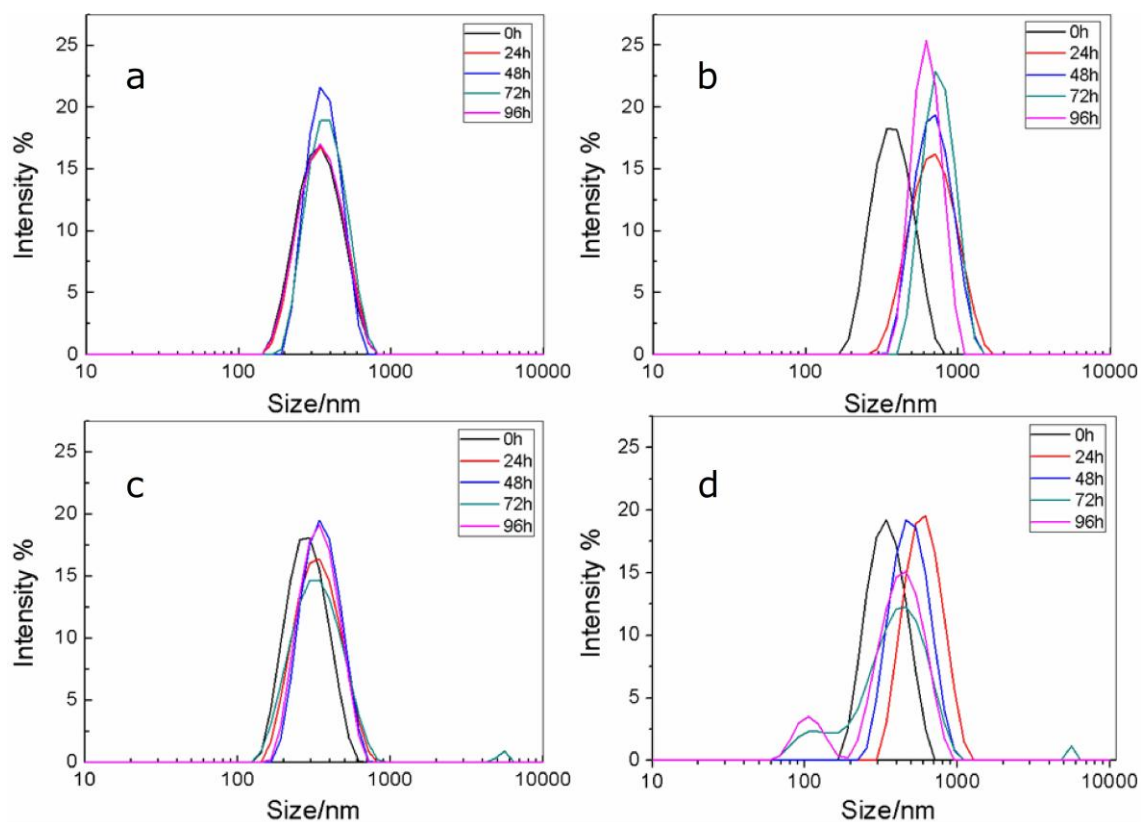


Figure S6 Size distribution profiles of different times for DOX/Fe(bbi) in (a) pH 7.4 PBS (b) pH 5.0 PBS and DOX/Fe(bbi)@SiO₂ in (a) pH 7.4 PBS (b) pH 5.0 PBS determined by DLS.

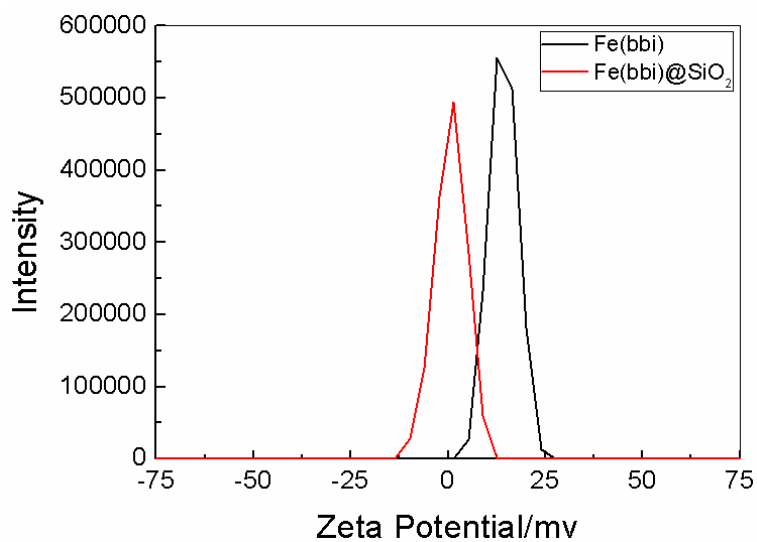


Figure S7 Zeta potential of DOX/Fe(bbi) and DOX/Fe(bbi)@SiO₂ in deionized water.

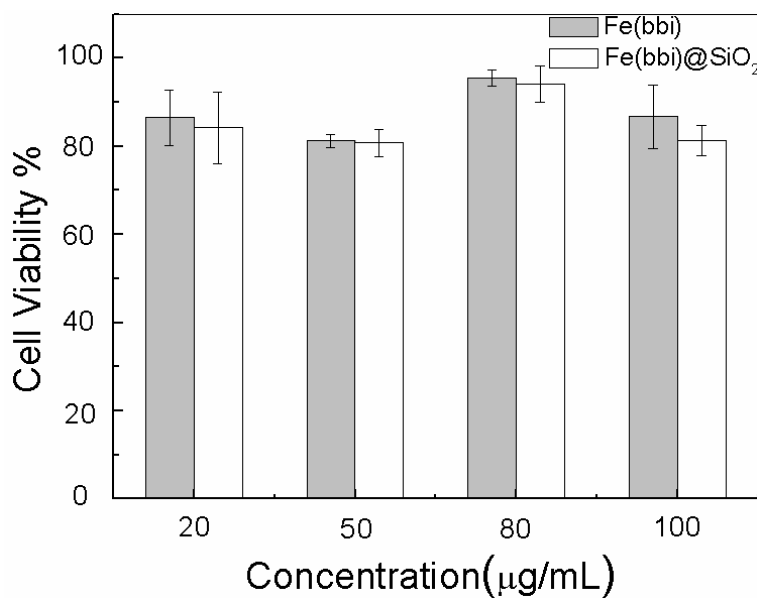


Figure S8 In vitro cytotoxicity of Fe(bbi) and Fe(bbi)@SiO₂ in 48h.